

ABSTRACT OF THE DISCLOSURE

A semiconductor device having a MOS transistor capable of effectively reducing leakage current and a method of manufacturing the same are provided. A
5 silicon nitride film (11) is formed at the interface between a silicon substrate (1) and an oxide film (2) in the area except for the region for forming a polysilicon gate electrode (3) (i.e., an out-of-gate-electrode region). A silicon nitride film (13) is formed at the interface between the oxide film (2) and the side surface of the polysilicon gate electrode (3). Since the silicon nitride films (11, 13) can suppress the progress of oxidation, the
10 oxidation of the silicon substrate (1) and the polysilicon gate electrode (3) can be suppressed effectively during a smile oxidation processing for obtaining the final shape of the oxide film (2). This enables to realize the structure that the oxide film (2) on the side surface of the polysilicon gate electrode (3) and the oxide film (2) in the out-of-gate-electrode region are formed so as to be thinner in thickness than the underside
15 of the central portion of the polysilicon gate electrode (3).